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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,191	10/06/2000	Reginald Hunter	AMAT/3083.P7/FET/FET/DV	5577
32588	7590	02/26/2004	EXAMINER	
APPLIED MATERIALS, INC. 2881 SCOTT BLVD. M/S 2061 SANTA CLARA, CA 95050			SMITH, ZANDRA V	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/685,191	HUNTER, REGINALD	
	Examiner	Art Unit	
	Zandra V. Smith	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 5, 13 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7-9, 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by

Dishon et al. (6,166,801).

As to **claim 1**, Dishon discloses a system useful in photolithographically processing substrates, comprising:

receiving from an optical inspection systems, process data readings comprising optical signal signature information indicative of a topographical condition on a substrate; and

processing the process data reading to determine a subsequent handling step (col. 15, lines 20-30 and col. 16, line 56-col. 17, line 22).

As to **claims 2 and 11**, Dishon discloses everything claimed, as applied above, in addition if the process data exceeds a predetermined value an unacceptable topographical condition is determined to exist and the substrate is transferred to an inspection platform (col. 17, lines 20-22).

As to **claims 3 and 12**, Dishon discloses everything claimed, as applied above, in addition substrate defect information is obtained (col. 17, lines 1-22).

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As to **claim 4**, Dishon discloses everything claimed, as applied above, in addition the process readings determine whether to transfer the substrate to an inspection system (col. 17, lines 20-22).

As to **claim 7**, Dishon discloses a system useful in photolithographically processing substrates, comprising:

a plurality of optical inspection system, including a platform, to perform optical inspection systems to perform optical inspection at different degrees of resolution,

a controller connected to the plurality of optical inspection systems and the platform to process data readings comprising optical signal signature information indicative of a topographical condition on a substrate and to process the process data reading to determine a subsequent handling step and transfer the substrate to the inspection platform for further optical inspection (col. 16, line 56-col. 17, line 22 and col. 15, lines 40-50).

As to **claim 8**, Dishon discloses everything claimed, as applied above, in addition the optical inspection systems are disposed on a processing system along a transfer path of the substrate (col. 10, line 64-col. 11, line 30).

As to **claim 9**, Dishon discloses everything claimed, as applied above, in addition the receiver is a CCD (92).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 10, 14, 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dishon et al (6,166,801).

As to **claim 6**, Dishon discloses a system useful in photolithographically processing substrates, comprising:

receiving from one of a plurality of optical inspection systems, process data readings comprising optical signal signature information indicative of a topographical condition on a substrate (col. 15, lines 20-30 and col. 16, line 56-col. 17, line 22); and

in an additional embodiment discloses determining the position of the substrate in the processing system (col. 19, lines 1-12). It would have been obvious to one having ordinary skill in the art at the time of invention to determine the position of the substrate in the processing system for higher accuracy of measurement.

As to **claims 10 and 18**, Dishon discloses everything claimed, as applied above, with the exception of an input unit, however since the system operates with respect to predetermined parameters and a control unit operates the system in response to the predetermined parameters (col. 7, lines 45-50 and col. 8, lines 10-15), it would have been obvious to one having ordinary skill in the art at the time of invention to include an input unit to provide a means to inform the control unit of its operating parameters.

As to **claim 14**, Dishon discloses a system useful in photolithographically processing substrates, comprising:

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a plurality of optical inspection system, including a platform, to perform optical inspection systems to perform optical inspection at different degrees of resolution,

a controller connected to the plurality of optical inspection systems and the platform to process data readings comprising optical signal signature information indicative of a topographical condition on a substrate and to process the process data reading to determine a subsequent handling step and transfer the substrate to the inspection platform for further optical inspection (col. 16, line 56-col. 17, line 22 and col. 15, lines 40-50).

Dishon differs from the claimed invention in that an input is not provided however since the system operates with respect to predetermined parameters and a control unit operates the system in response to the predetermined parameters (col. 7, lines 45-50 and col. 8, lines 10-15), it would have been obvious to one having ordinary skill in the art at the time of invention to include an input unit to provide a means to inform the control unit of its operating parameters.

As to **claim 16**, Dishon discloses everything claimed, as applied above, in addition each inspection system is disposed on a processing system along a transfer path (see fig. 6, col. 10, line 64-col. 11, line 30).

As to **claim 17**, Dishon discloses everything claimed, as applied above, in addition a CCD (92) is provided.

As to **claim 19**, Dishon discloses everything claimed, as applied above, in addition if the process data exceeds a predetermined value an unacceptable topographical condition is determined to exist and the substrate is transferred to an inspection platform (col. 17, lines 20-22).

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As to **claim 20**, Dishon discloses everything claimed, as applied above, in addition substrate defect information is obtained (col. 17, lines 1-22).

Allowable Subject Matter

Claims 15 are allowed.

Claims 5, 13, and 21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, taken alone or in combination, fails to disclose or render obvious, a processing system comprising a cluster tool that includes disposing one of the plurality of inspection systems on the process chamber and another one of the plurality on the transfer chamber or a termination step, in combination with the rest of the limitations of claim.

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Fax/Telephone Information

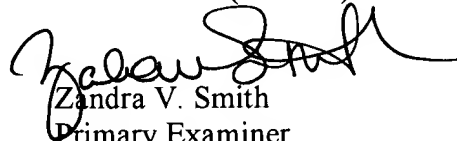
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zandra V. Smith whose telephone number is (571) 272-2429.

The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703)308-4881. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Zandra V. Smith
Primary Examiner
Art Unit 2877

February 5, 2004